

# Safety Data Sheet

## Librel® RMX 8

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(55735372/SDS\_GEN\_US/EN)

### 1. Identification

#### Product identifier used on the label

**Librel® RMX 8**

#### Recommended use of the chemical and restriction on use

Recommended use\*: Chelate

\* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

#### Details of the supplier of the safety data sheet

##### Company:

BASF CORPORATION

100 Park Avenue

Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

#### Emergency telephone number

CHEMTREC: 1-800-424-9300

BASF HOTLINE: 1-800-832-HELP (4357)

#### Other means of identification

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### 2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

#### Classification of the product

No need for classification according to GHS criteria for this product.

#### Label elements

The product does not require a hazard warning label in accordance with GHS criteria.

#### Hazards not otherwise classified

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No specific dangers known, if the regulations/notes for storage and handling are considered.

### Labeling of special preparations (GHS):

This product is not combustible in the form in which it is shipped by the manufacturer, but may form a combustible dust through downstream activities (e.g. grinding, pulverizing) that reduce its particle size.

### According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

#### Emergency overview

WARNING:

HARMFUL IF SWALLOWED.

May cause slight irritation to the eyes.

Organic powders may be capable of generating static discharges and creating explosive mixtures in air. Handle with caution.

Refer to MSDS Section 7 for Dust Explosion information.

### 3. Composition / Information on Ingredients

#### According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
14025-15-1	>= 15.0 - < 20.0 %	Cuprate(2-), [[N,N'-1,2-ethanediylbis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)]-, disodium, (OC-6-21)-

#### According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
15708-41-5	40.0 - 50.0 %	Ferrate(1-), [[N,N'-1,2-ethanediylbis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)]-, sodium, (OC-6-21)-
15375-84-5	10.0 - 30.0 %	Manganate(2-), ((N,N'-1,2-ethanediylbis(N-(carboxy-.kappa.O)methyl)glycinato-.kappa.N,.kappa.O))(4-)-, disodium, (OC-6-21)-
14025-15-1	10.0 - 20.0 %	Cuprate(2-), [[N,N'-1,2-ethanediylbis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)]-, disodium, (OC-6-21)-

### 4. First-Aid Measures

#### Description of first aid measures

#### Most important symptoms and effects, both acute and delayed

Symptoms: No significant symptoms are expected due to the non-classification of the product.

#### Indication of any immediate medical attention and special treatment needed

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### 5. Fire-Fighting Measures

#### Extinguishing media

Suitable extinguishing media:

carbon dioxide, dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons:

water jet

Additional information:

Water jet can rapidly spread fire.

#### Special hazards arising from the substance or mixture

##### Advice for fire-fighters

Protective equipment for fire-fighting:

Wear self-contained breathing apparatus and chemical-protective clothing.

##### Further information:

Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

### 6. Accidental release measures

#### Further accidental release measures:

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

#### Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures see, section 8.

#### Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

#### Methods and material for containment and cleaning up

Nonsparking tools should be used.

### 7. Handling and Storage

#### Precautions for safe handling

Breathing must be protected when large quantities are decanted without local exhaust ventilation.

Protection against fire and explosion:

Avoid dust formation. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (2013 Edition) for safe handling.

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### Conditions for safe storage, including any incompatibilities

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

## 8. Exposure Controls/Personal Protection

### Components with occupational exposure limits

Manganate(2-), ((N,N'-1,2-ethanediylbis(N-(carboxy-.kappa.O)methyl)glycinato-.kappa.N,.kappa.O))(4-)-, disodium, (OC-6-21)-	OSHA PEL	CLV 5 mg/m <sup>3</sup> (manganese (Mn)); CLV 5 mg/m <sup>3</sup> (manganese (Mn));
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### Advice on system design:

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

### Personal protective equipment

#### Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

#### Hand protection:

Chemical resistant protective gloves

#### Eye protection:

Safety glasses with side-shields.

#### Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

### General safety and hygiene measures:

Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice. No eating, drinking, smoking or tobacco use at the place of work. Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and Chemical Properties

Form:	free flowing fine granules
Odour:	mild
Odour threshold:	not determined
Colour:	green
pH value:	5 - 8 ( 20 g/l)
Melting point:	The substance / product decomposes therefore not determined.
Boiling point:	not applicable
Flash point:	not applicable

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Flammability:	not readily ignited	
Lower explosion limit:		For solids not relevant for classification and labelling.
Upper explosion limit:		For solids not relevant for classification and labelling.
Autoignition:	> 500 °C	
Vapour pressure:	< 0.000001 hPa	( 25 °C)
Density:		Study does not need to be conducted.
Relative density:		No data available.
Bulk density:	650 - 900 kg/m3	
Vapour density:		The product is a non-volatile solid.
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Self-ignition temperature:		not self-igniting
Thermal decomposition:	> 100 °C	
Viscosity, dynamic:		not applicable
Viscosity, kinematic:		not applicable, the product is a solid
Particle size:		No data available.
% volatiles:		not determined
Solubility in water:		soluble
Evaporation rate:		The product is a non-volatile solid.
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

## 10. Stability and Reactivity

### Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:

not fire-propagating

### Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### Possibility of hazardous reactions

The product is not a dust explosion risk as supplied; however the build-up of fine dust can lead to a risk of dust explosions.

### Conditions to avoid

Avoid extreme temperatures.

### Incompatible materials

strong oxidizing agents, strong alkalies

### Hazardous decomposition products

Decomposition products:

Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

> 100 °C

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### 11. Toxicological information

#### Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

#### Acute Toxicity/Effects

##### Acute toxicity

Assessment of acute toxicity: Of low toxicity after single ingestion.

##### Oral

Type of value: LD50

Species: rat

Value: > 2,000 - 5,000 mg/kg

The product has not been tested. The statement has been derived from the properties of the individual components.

*Information on: Cuprate(2-), [[N,N'-1,2-ethanediylbis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)]-, disodium, (OC-6-21)-*

*Type of value: LD50*

*Species: rat (male/female)*

*Value: 890 mg/kg (BASF-Test)*

##### Inhalation

Type of value: LC50

Species: rat

not determined

##### Dermal

Type of value: LD50

Species: rat

not determined

##### Assessment other acute effects

No data available.

##### Irritation / corrosion

Assessment of irritating effects: May cause slight irritation to the eyes.

##### Eye

Species: In vitro assay

Result: non-irritant

Method: EpiOcular

##### Sensitization

Assessment of sensitization: There is no evidence of a skin-sensitizing potential.

##### Aspiration Hazard

not applicable

#### Chronic Toxicity/Effects

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### Repeated dose toxicity

Assessment of repeated dose toxicity: No data available.

*Information on: Manganate(2-), ((N,N'-1,2-ethanediylbis(N-(carboxy-.kappa.O)methyl)glycinato-.kappa.N,.kappa.O))(4-)-, disodium, (OC-6-21)-*

*Assessment of repeated dose toxicity: The substance may cause damage to the kidney after repeated ingestion of high doses, as shown in animal studies.*

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### Genetic toxicity

Assessment of mutagenicity: No data available concerning mutagenic effects.

### Carcinogenicity

Assessment of carcinogenicity: No data available concerning carcinogenic effects.

### Reproductive toxicity

Assessment of reproduction toxicity: No data available.

### Teratogenicity

Assessment of teratogenicity: No data available.

*Information on: Ferrate(1-), [[N,N'-1,2-ethanediylbis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)]-, sodium, (OC-6-21)-*

*Assessment of teratogenicity: Causes developmental effects in animals at high, maternally toxic doses. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.*

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### Other Information

On the basis of the product's composition, no acute general toxic effects are to be expected. The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

## Symptoms of Exposure

No significant symptoms are expected due to the non-classification of the product.

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## 12. Ecological Information

### Toxicity

#### Aquatic toxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms.

#### Toxicity to fish

LC50 > 100 mg/l

#### Aquatic invertebrates

LC50 (48 h), daphnia  
not determined

#### Aquatic plants

EC50 (72 h), algae  
not determined

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### Chronic toxicity to fish

No data available.

### Chronic toxicity to aquatic invertebrates

No data available.

## Microorganisms/Effect on activated sludge

### Toxicity to microorganisms

bacteria/EC50 (0.5 h):

not determined

## Persistence and degradability

### Assessment biodegradation and elimination (H2O)

The product can be virtually eliminated from water by abiotic processes e.g. adsorption onto activated sludge.

## Bioaccumulative potential

### Assessment bioaccumulation potential

The product has not been tested.

### Bioaccumulation potential

Significant accumulation in organisms is not to be expected.

## Mobility in soil

### Assessment transport between environmental compartments

No data available.

## Additional information

Add. remarks environm. fate & pathway:

Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other ecotoxicological advice:

Do not discharge product into the environment without control.

The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

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## 13. Disposal considerations

### **Waste disposal of substance:**

Dispose of in accordance with national, state and local regulations.

### **Container disposal:**

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

### **RCRA:**

Not a hazardous waste under RCRA (40 CFR 261).

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### 14. Transport Information

#### Land transport

USDOT

Not classified as a dangerous good under transport regulations

#### Sea transport

IMDG

Not classified as a dangerous good under transport regulations

#### Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

### 15. Regulatory Information

#### VOC content:

not determined

#### Federal Regulations

##### Registration status:

Chemical TSCA, US released / listed

##### EPCRA 311/312 (Hazard categories):

Chronic;

##### CERCLA RQ

10 LBS

##### CAS Number

143-33-9

##### Chemical name

Sodium Cyanide

#### State regulations

##### State RTK

NJ

##### CAS Number

15375-84-5

##### Chemical name

Manganate(2-), ((N,N'-1,2-ethanediylbis(N-(carboxy-.kappa.O)methyl)glycinato-.kappa.N,.kappa.O))(4-), disodium, (OC-6-21)-  
Cuprate(2-), [[N,N'-1,2-ethanediylbis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)]-, disodium, (OC-6-21)-

##### CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

##### NFPA Hazard codes:

Health : 1 Fire: 1 Reactivity: 0 Special: -

##### HMIS III rating

Health: 1 Flammability: 1 Physical hazard: 0

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### 16. Other Information

#### SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2015/03/09

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END OF DATA SHEET